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## SOME RECORDS OF SMALL MAMMALS FROM THE SOUTHERN NORTHERN TERRITORY

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### Introduction

During a three year study of the biology and distribution of the European Rabbit, *Oryctolagus cuniculus*, in the Northern Territory, records of small mammals were kept with the view that there might be some relationship between small mammal distribution and Rabbit distribution. Such an assessment would be a major study in itself and we present here a map (Figure 1) showing the locations of our records and some observations that may be of use to a more detailed study in the future. The observations were made between August 1980 and August 1983 and they supplement Parker's (1973) earlier records of the distribution of small mammals in the Northern Territory.

### Methods

Elliott traps were baited with various mixtures of bread, peanut butter, bacon, and occasionally oats, nuts and even biscuits. Up to 16 traps were set out in two transects. Traps were set out overnight but on many occasions they were not set until around midnight.

Quite a few of the mammals were caught by hand under the glare of a spotlight.

Some of our records are from analysis of stomach contents of Feral Cats (Strong and Low 1983) shot during the study.

Other records, e.g. *Ningauai sp.*, are fairly certain sightings. We became quite adept at identifying *Antechinomys laniger* and *Notomys alexis* by their appearance, gait and the habitat. On the other hand, to distinguish between *Pseudomys* and *Mus* without a close examination was impossible and we often saw one or the other.

### Results

In all we recorded 9 species (Table 1) including the introduced House Mouse, *Mus musculus*. Elliott traps were not successful, even where we knew there were small mammals about. In all we set a total of 289 Elliott traps on 19 nights for only seven animals trapped. The House Mouse would seem to be the most easily trapped. *Notomys* and *Sminthopsis* were relatively easily caught by hand, whereas *Antechinomys* were extremely agile. Among the small mammals *Mus* was the most common prey item of Feral Cats, followed by *Notomys* (Strong and Low 1983).

We saw large numbers of *Notomys alexis* on three occasions in 1982 — January in the Tanami, September on Eridunda Station and September on the northern end of Andado Station.

*Antechinomys* were mostly found in open calcrete areas south of the MacDonnell Ranges, a habitat much favoured by Rabbits. The one exception was a sighting on open granite plains and low hills near the South Australian border. Professional Rabbit shooters also reported seeing them in the area.

The one *Leggadina* was taken from a Feral Cat shot in a creek running into the Hale River. The nearest Rabbit populations were on the flood plains of the Hale, about 1 km away.

The *Macrotis* was seen on the spinifex sand plain country of the Tanami area which is an area relatively free of Rabbits.

*Mus* were found in a variety of habitats from calcrete plains through spinifex sand plain and sand dunes to the riverine habitats of the Hale and Hugh Rivers. Rabbits were found in the same general areas.

The *Ningau* was seen in scrubby spinifex sand plain in the Tanami during a period when Gibson (pers. Comm., 1982) was live trapping the species. The area was relatively free of Rabbits.

*Notomys* were confined to spinifex sand plains and sand dunes north and south of the MacDonnells. Particularly in the south, they were found in areas occupied by Rabbits.

The *Pseudomys* were trapped on an open calcrete plain with perennial *Aristida* sp. dominating. Two *Pseudomys* were prey of a Feral Cat taken from a similar area in the north-west but with a thicker and more diverse vegetation cover. Both were Rabbit infested areas.

The two *Sminthopsis* were taken from different habitats. One was a thickly grassed (mainly *Aristida* sp.) alluvial plain and the other from a gently undulating open stony plain dominated by Chenopods. Both these areas are Rabbit infested.

The *Trichosurus* were found along major drainage lines on plains country associated with the Eastern MacDonnells. They favoured ironwoods *Acacia estrophiolata*, river red gum *Eucalyptus camaldulensis* and in one case acacia bush *Acacia victoriae*. Rabbits occur in the same areas.

### Discussion

During the three year study, climatic conditions were dominated by summer/autumn rainfalls with dry winter and spring conditions. In general, except for the dry period during 1980, vegetation was moderately abundant with good seed supplies and insects were abundant.

Most of the mammals were seen in or near Rabbit infested areas, though not necessarily in the same habitat. Since most of our evening work was in Rabbit infested areas we cannot comment on the distribution of small mammals outside those areas.

### Acknowledgements

The work was done while we were under contract to the Conservation Commission of the Northern Territory, supported by funds provided through the Feral Animals Committee.

Our thanks to Dave Gibson who helped with identification.

### References

- PARKER, S. A. (1973), An annotated checklist of the native land mammals of the Northern Territory, *Records of the South Australian Museum*, vol. 16 (II), 1-57.
- STRONG, B. W. and LOW, W. A. (1983), Some observations of Feral Cats *Felis catus* in the southern Northern Territory, Technical Report No. 9, Conservation Commission of the Northern Territory, Alice Springs.

**Table 1: SMALL MAMMALS RECORDED FROM THE SOUTHERN NORTHERN TERRITORY BETWEEN AUGUST 1980 AND AUGUST 1983**

Species	Number of Individuals			
	Hand Caught	Trapped	Sighted	Cat Prey
<i>Antechinomys spenceri</i>	6	—	17	—
<i>Leggadina forresti</i>	—	—	—	1
<i>Macrotis lagotis</i>	—	—	1	—
<i>Mus musculus</i>	4	4	(?)	5
<i>Ningauī</i> sp.	—	—	1	—
<i>Notomys alexis</i>	2	1	Numerous	2
<i>Pseudomys hermannsburgensis</i>	—	2	(?)	2
<i>Sminthopsis crassicaudata</i>	2	—	—	—
<i>Trichosurus vulpecula</i>	—	—	7	—

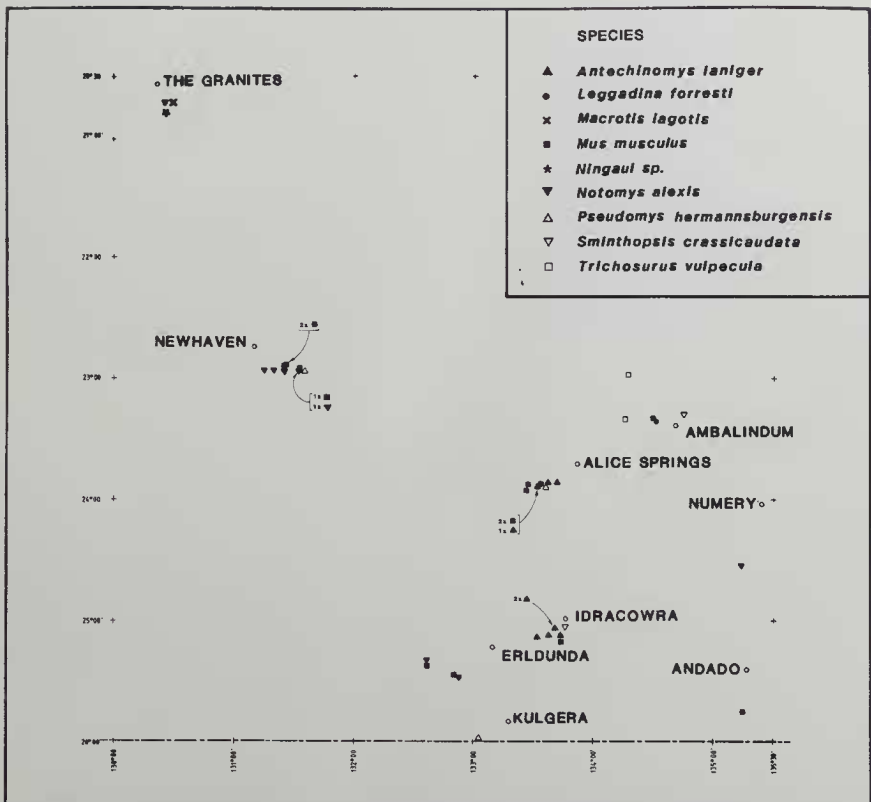


Figure 1: Some records of small mammals from the southern Northern Territory.